

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,153		03/11/2004	Chikara Ishizaka	81864.0034	7908
26021	7590	12/14/2005		EXAMINER	
HOGAN &	HARTS	ON L.L.P.	SHEEHAN, JOHN P		
500 S. GRA SUITE 1900		NUE		ART UNIT PAPER NUMBER	
		90071-2611		1742	
				DATE MAILED: 12/14/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

			0
	Application No.	Applicant(s)	
	10/799,153	ISHIZAKA ET AL.	
Office Action Summary	Examiner	Art Unit	
	John P. Sheehan	1742	
The MAILING DATE of this communication appeared for Reply	pears on the cover sheet with the o	correspondence addres	ss
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this commod (35 U.S.C. § 133).	
Status			
1)☐ Responsive to communication(s) filed on 2a)☐ This action is FINAL. 2b)☒ This 3)☐ Since this application is in condition for alloware closed in accordance with the practice under the practice under the practice.	s action is non-final. ince except for formal matters, pro		erits is
Disposition of Claims			
4) ☐ Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-9 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 11 March 2003 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Examine 11) ☐ The oath or declaration is objected to by the Examine 11) ☐ The oath or declaration is objected to by the Examine 11) ☐ The oath or declaration is objected to by the Examine 11) ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 11 ☐ The oath or declaration is objected to by the Examine 12 ☐ The oath or declaration is objected to by the Examine 12 ☐ The oath or declaration is objected to by the Examine 12 ☐ The oath or declaration is objected to by the Examine 12 ☐ The oath or	or election requirement. er. a)⊠ accepted or b)□ objected to the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1	* .*
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Sta	ge
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/04 & 6/05.	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:		2)

Application/Control Number: 10/799,153 Page 2

Art Unit: 1742

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. Regarding the information disclosure statements submitted March 11, 2004 and June 6, 2005, it is noted that with the exception of documents, EP 1 164 599; EP 0 302 395; and EP 0 935 260, complete copies of each of the listed foreign patent documents were not submitted but rather only English language abstracts were submitted for each of the cited foreign patent documents.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 2 and 5 ere rejected under 35 U.S.C. 102(b) as anticipated by each of Kim et al., and S. Besenicar et al. (The Influence of ZrO₂ Addition on the

Art Unit: 1742

Microstructure...of Nd-Dy-Fe-B Magnets) (each of these references was cited in the IDS submitted June 6, 2005).

Each of the references teaches a sintered rare earth-transition metal-boron permanent magnet containing Zr as recited in applicants' claim 5 (Kim et al., the paragraph under the heading "II. Experimental Procedure"; and S. Besenicar et al., page 1175, left column, third full paragraph).

Each of the references also teaches that the disclosed sintered product contains a region that is rich in Zr as recited in applicants' claim 5 (Kim et al., page 3825, right column, lines 1 to 4; and S. Besenicar, page 1175, right column, first full paragraph, lines 8 to 11).

The references teach the presence of the R₂Fe₁₄B structure as recited in each of applicants' claims (Figure 2; Kim et al., page 3824, right column, line 4, and S. Besenicar et al., page 1176, left column, line 4 and Figure 4).

Each of the references also teaches the presence of an Nd-rich phase, that is, "a grain boundary phase containing a higher amount of R than said phase" (Kim et al., page 3824, right column, line 4, S. Besenicar, page 1175, right column, first full paragraph, lines 8 to 11).

Kim et al. teaches that the sintered product possesses the same microstructure as the cast alloy (page 3824, right column, lines 1 to 6). In view of the fact that Kim's cast alloy possesses feather-like Zr rich phases adjacent the Nd-rich phases (page 3823, right column, first full paragraph), Kim's sintered product would be expected to also possess the feather-like Zr rich phases. S. Besenicar teaches that the sintered

Application/Control Number: 10/799,153

Art Unit: 1742

product contains Zr containing lamellae phase in the Nd-rich phase (page 1175, right column, first full paragraph, lines 8 to 11). Thus each of the references is considered to teach "a grain boundary phase containing a higher amount of R than said main phase, wherein a platy or acicular product exists" as recited in applicants' claims.

In view of the above description of the teaching s of each of the references, each of the references is considered to anticipate claims 1, 2 and 5.

Claim Rejections - 35 USC § 102/103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 3, 4, 6 and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of Kim et al., and S. Besenicar et al. (The Influence of ZrO₂ Addition on the Microstructure...of Nd-Dy-Fe-B Magnets) (each of these references was cited in the IDS submitted April 18, 2005).

Each of the references teaches and is applied as set forth above.

The claims and references differ in that the references do not teach the properties recited in claims 3, 4 and 6 nor the oxygen content taught in claim 7.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the sintered magnets taught by each of the references, with the exception of the properties recited in claims 3,

Application/Control Number: 10/799,153 Page 5

Art Unit: 1742

4, 6 and 7, is encompassed by the claimed sintered magnets and is made by a process which is similar to, if not the same as, applicants' process of making the instantly claimed sintered magnet, therefore the sintered magnets taught by the references would be expected to posses all the same properties, including the properties recited in claims 3, 4 and 6 and the oxygen content taught in claim 7, In re Best, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)."

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

Application/Control Number: 10/799,153

Art Unit: 1742

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 to 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 to 5 of U.S. Patent No. 6,811,620. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of these two sets of claims overlap, that is, each of the products recited in each set of claims is made by the same process and therefore would be expected to possess the same properties, In re Best, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

Claims 1 to 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 to 7 of copending Application No. 10/675,230 and claims 1 to 11 of copending application 10/675,912. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of these two sets of claims overlap,

Art Unit: 1742

that is, each of the products recited in each set of claims is made by the same process and therefore would be expected to possess the same properties, In re Best, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1 to 9 are directed to an invention not patentably distinct from claims 1 to 5 of commonly assigned U.S. Patent No. 6,811,620; and claims 1 to 11 of U.S. Patent Application No. 10/675,912. Specifically, Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of these two sets of claims overlap, that is, each of the products recited in each set of claims is made by the same process and therefore would be expected to possess the same properties, In re Best, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for

Art Unit: 1742

believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

Page 8

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned U.S. Patent No. 6,811,620 and U.S. Patent Application No. 10/675,912, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

8. Claims 1 to 9 are rejected under 35 U.S.C. 103(a) as being obvious overreach of U.S. Patent No. 6,811,62 and U.S. Patent Application Nos.10/675,230 and 10/675,912.

The applied reference has a common assignee and with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). The claims are rejected for the same reasoning as set forth above in the obvious double patenting rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

Application/Control Number: 10/799,153 Page 10

Art Unit: 1742

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John P. Sheehan Primary Examiner Art Unit 1742

jps